

## **An Investigation into Iranian Undergraduate English Students' Perceptions about the Importance and Use of CALL Before and After a Related Course**

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Over the past decades, there has been an increasing tendency to incorporate new technologies in language education. Although EFL students and teachers are accustomed to using new technologies in their everyday life, they may not be well aware of such assets in education. This qualitative study aimed at investigating how Iranian B.A. English students perceived and used new technologies before and after an undergraduate course of CALL. A total of 27 senior students of Yasouj University participated in this study. They were interviewed by one of the researchers before and after the course. Content analysis of the interviews revealed that almost all participants appreciated the course and it had engendered their enthusiasm about CALL potentialities and the new learning options it might offer. The respondents maintained that the course raised their awareness on how CALL could expedite their learning through providing more chances of both oral and written communications with native and non-native speakers of English well beyond the confinements of their traditional EFL classes. Although some participants were anxious about utilizing new technologies, they were favorably inclined towards CALL uses after the course. More specifically, the paper provides insights into the implications of raising university students' awareness about CALL.

**Keywords:** computer-assisted language learning, perception, English learning and teaching, educational technology

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## 1 Introduction

Nowadays, a considerable amount of attention has been given to the use of technology in education. Many researchers believe that incorporating information and communication technology in education helps students in constructing their thinking processes and challenges them in problem solving operations (Diaz & Bontemba, 2000; Pemberton, Borrego, & Cohen, 2006; Teo, 2006; Wright, 2008). It seems that modern technology is a facilitating instrument which has become a component of the instructional process rather than an additional or complementary part. In language teaching, computer-assisted language learning (CALL) is nowadays a valuable tool in teaching and learning second languages worldwide (Hubbard, 2009; Levy & Stockwell, 2006). Modern technology has particularly been an influential instrument in developing learners' cooperative, communicative, and problem-solving skills and lifelong learning. As a result, it is not strange that language teaching practitioners, especially in communicative language teaching classes, take great advantages of these new technologies in order to create better opportunities for experiential learning, enhancing learners' motivation, increasing interactions between teacher-students and students and peers, adapting learning to the learners' needs and assessing their learning according to their particular abilities and skills. Therefore, the fact that these new technologies be accepted and utilized by learners is of great importance. In this way, learners' perceptions can play an important role in whether they accept and successfully apply related technologies in supporting their learning process.

Some studies have focused on students' perceptions of and attitudes towards CALL (Lee, 2004; Murday, Ushida, & Chenoweth, 2008; Teo, 2006; Winke, Goertler, & Amuzie, 2010; Woodrow, 1991). An analysis of these studies shows the important role language learners' perceptions play in foreign language learners' acceptance and use of CALL. It has been claimed that the integration of technology into teaching and learning programs is a controversial issue for teachers, students, educationalists, curriculum developers, etc. (Hubbard, 2009) due to many factors including lack of familiarity with new technologies, lack of enough facilities in schools, and the negative perspectives of teachers and students about the usefulness of these technologies in educational settings. However, most studies are coherent with a positive influence of using new technologies on language learning. Thus the current study was accordingly motivated to qualitatively examine how Iranian University English students perceive a CALL class before attending it, during the course of instruction, and after the end of the course. In other words, the study aims at investigating the effects of a related CALL course on the students' perceptions and implementations of these new technologies during and after the course.

## 2 Review of the Related Literature

With the introduction of the new technologies into the area of language instruction, a vast body of studies characterizing and evaluating CALL has been conducted on the efficaciousness of CALL-based activities in order to promote language learning in foreign language learning contexts (Chapelle, 2001; Crystal, 2001; Debski & Levy, 1999; Egbert & Hanson-Smith, 1999; Felix, 1998; 2001, 2004; Hanson-Smith, 2000; Levy, 1997; Liaw, Huang, & Chen, 2007; Ushida, 2005; Warschauer & Kern, 2000; Warschauer, Shetzer, & Meloni, 2000). These studies, to a large extent, put emphasis on the important and positive role of CALL in enhancing linguistic proficiency and communicative competence in L2 learners via promoting the levels of learners' autonomy, motivation, satisfaction, self-confidence and self-regulation. Some other studies have gained mixed results (Ayres, 2002; Sagarra & Zapata, 2008; Stepp-Greany 2002, Stracke, 2007). Many studies have focused on the kind of technologies that are accessible for the language learners (Conole, 2008). As well as acknowledging the substantial criticality attributed to the use of CALL and distance learning activities, researchers argue that CALL creates classroom discourse communities and motivates shy students to take part in class activities more efficiently (Palloff & Pratt, 1999; Warschauer, 1996). Furthermore, students argued that CALL class activities made it easier for them to expand their opinions and to upgrade their level of learning together with their classmates. Needless to say, such findings are indicative of the considerable benefits of CALL, as to how it exerts a strong influence on the learners in the way that they can become proficient in computers and feel proud of being autonomous in the context of classroom (Shetzer & Warschauer, 2000; Warschauer, 1996, 2002).

It should be noted that having access to new technologies does not guarantee their successful applications and effectiveness in EFL classes as Kadel (2005, p. 34) states that you need to have "the right attitude toward the technology". Therefore, the perceptions and attitudes of EFL learners as well as their teachers play an important role in the effective use of these new technologies in language classes. There is a wealth of empirical research on CALL which is concerned with the attitudes towards and perceptions of the uses and effects of CALL on language learning (Al-Juhani, 1991; Belal, 2011; Goertler, Bollen, & Gaff, 2012; Sarfraz, Mansoor, & Tariq, 2015; Thaipakdee, 1992). On balance, most of these studies agree with the positive learning environments through the use of technology, especially CALL. Some studies, however, have found negative or not significantly positive perceptions towards CALL (Min, 1998; Warschauer & Healey, 1998). The positive perceptions and attitudes are mainly due to the effect of CALL on motivating students (Lai & Gu, 2011; Lee, 2000; Milton, 1997), increasing the amount of communication and learner participation in the classroom and outside of the classroom (Jorge, Jorge, Gutiérrez, García & Díaz, 2003;

Shetzer & Warschauer, 2000), offering students with authentic materials (Meskill & Anthony, 2005; Mosquera, 2001; Shetzer & Warschauer, 2000; Wang, 2006) and promoting students' self-regulation and self-confidence (Lai & Gu, 2011). On the other hand, the negative perspectives are mostly related to the fact these technologies may not properly be adopted in an EFL classroom.

In light of the need for more studies on perceptions about CALL and by taking into account the inconsistencies observed among the results from studies dealing with perceptions about CALL, the prominence of doing further studies in the educational becomes more important. Therefore, the present study sought to scrutinize Iranian university English students' perceptions and insights into how they were influenced by CALL and how it was viewed and practiced. In particular, this study was meant to enquire into the degree to which a CALL course can influence the Iranian university English students' perception and use of CALL and its components in their classroom activities and to probe the foundational factors affecting their propensities towards the use of these components.

### 3 Method

#### 3.1 Participants and sampling

Twenty seven university English students studying at Yasouj University in Iran (nine males and eighteen females) participated in this study. All were non-native speakers of English and doing their B.A. as senior students of Teaching English as a foreign language (TEFL). The age of the respondents ranged from 21 to 24. Moreover, it is worthwhile mentioning that twelve of the students have had experienced teaching English at different institutes of Yasouj city in basic, intermediate, upper intermediate, and advanced levels. The researchers made use of cluster sampling in order to select the participants of the study in harmony with the method and objectives of the study. Table 1 summarizes the demographic information of the interviewed students. The names are changed into nicknames in order to keep the participants' information confidential.

Table 1. The Demographic Information of the Subjects

TTN No	Name	Age	Gender	Teaching experience
1	Andrea	24	Male	1 year
2	Michael	21	Male	0 year
3	Matt	23	Male	3 years
4	Jack	23	Male	0 year
5	Hammond	22	Male	2 years
6	Eric	22	Male	1 year

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7	Harold	22	Male	0 year
8	Josef	23	Male	3 years
9	Frank	22	Male	0 year
10	Anita	23	Female	1 year
11	Eliza	24	Female	0 year
12	Elisa	23	Female	2 years
13	Samantha	23	Female	0 year
14	Nancy	21	Female	0 year
15	Sandra	22	Female	0 year
16	Sonia	22	Female	1 year
17	Fiona	22	Female	0 year
18	Patricia	22	Female	0 year
19	Sammie	22	Female	0 year
20	Mary	22	Female	2 years
21	Felicity	23	Female	2 years
22	Fatima	22	Female	0 year
23	Elmira	22	Female	1 year
24	Maria	21	Female	3 years
25	Susan	22	Female	0 year
26	Aileen	22	Female	0 year
27	Nadia	22	Female	0 year

It should also be mentioned that the course they attended to was a required course in the participants' regular academic career. It was held once a week and taught by one of the researchers. The main objectives of the course were teaching letter writing through the use of computers as well as type writing. However, it was decided to include other internet and communication technologies in this course.

### 3.2 Instrumentation

According to the objectives of the current study, semi-structured interviews were employed in order to understand the phenomenon under investigation and to create an opportunity for the interviewees to adequately mirror their insights and reflections. In so doing, the interviews comprised of open ended questions regarding how CALL is perceived before attending the CALL class, during the instruction, and after the end of the course by the university English students in the context of the classroom. In order to guarantee the comprehensibility and quality of the interview questions, they were piloted on two students with similar attributes.

### **3.3 Data collection procedure**

Numerous attempts were made to hold in-depth interviews with the respondents of the study so as to extract and examine their insights into the CALL class. The interview questions were developed and asked in Persian. However, the participants were freely given the chance of selecting the language to respond the questions. Interviews took five to ten minutes and were recorded with the permission of the interviewees. While being collected, the data were transcribed into written texts and then analyzed. All the responses were accurately translated into English while transcribing them. Besides, in order to make sure about the trustworthiness of the results, care should be well exercised to avoid bias through employing a prolonged and persistent field-work and accounting for the respondents' verbatim responses, as suggested by McMillan and Schumacher (2006). Thus the analysis of the transcribed data will be reported on the basis of the themes elicited from the verbatim responses of the respondents.

### **3.4 Data analysis procedure**

A good rule of thumb to follow in the analysis of accumulated data is to make use of content analysis because it enables researchers to sift through large volumes of data with relative ease in a systematic fashion (GAO, 1996). It can be a useful technique for allowing us to discover and describe the focus of individual, group, institutional, or social attention (Weber, 1990). It also allows inferences to be made which can then be corroborated using other methods of data collection. To this end, it is by virtue of conducting this qualitative study on the gathered data through the use of interviews that the researchers extensively utilized constant comparative content analysis, as suggested by Glaser and Strauss (1967), for interpreting the collected data and coding the transcribed interviews. The tally and analysis of the tokens of the similarities and patterns culminated in the emergence of a developing coding system for the categories. Then the units of analysis and coding schemes were defined and evolved throughout the process of content analysis and the codes were transmogrified into categorical labels or themes that were replicated or appeared as patterns in the interviews. In accordance with Patton (2002), this iterative procedure is about to contribute to the researchers in “developing some manageable classification or coding scheme” as “the first step of analysis” (p. 463). Data analysis proceeded incrementally and once the coherence and saturation of the data were performed, conclusions were drawn based upon the analyzed data.

## **4 Results and Discussion**

By holding profound interviews, the researchers attempted to survey the

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university English students' perceptions of CALL class and to find out to what degree they put those elements into practice while learning and teaching English.

### **4.1 The university English students' perceptions about the CALL class**

Critical observation of the students' comments on the interview questions eliciting their perceptions of the CALL class was indicative of the fundamental criticality of CALL class from many a perspective. To succinctly add, almost all the interviewees praised the usefulness of the course (T1) and became more and more enthusiastic (T2) about the new learning options provided by the CALL in further learning and teaching. This can be illustrated by 'Matt' who viewed the course as a milestone in his process of learning education, especially English learning. He elaborately cited:

I have been using technological devices for my English learning for the last eight years. But this CALL class has provided me with more spic and span facets of learning a foreign language like English. Actually, I got fonder of finding new on-line dictionaries for looking up every new word I happen to come across anywhere anytime. Using many English dictionaries synchronously perks me up (translated by the researchers).

Moreover, Mary and Maria mentioned that the CALL class provided them with an opportunity in order to have communication (T3) with their other classmates in any time and any place because they had a good command of their smart phones as well as the use of internet to chat on-line (T4) with their own partners. Suffice is to quote from Maria's viewpoint where she tersely added:

Actually I found that this class is quite a horse of different color to me where I managed to check up my cell phone and see my nice-net messages wherever I had access to the internet. It also made me more self-confident (T5) to express my own ideas regarding the issues which were hot in learning English in an easy way as far as possible (translated by the researchers).

What is more, almost all the interviewees asserted that they were familiar with the technological devices in that they knew how to practice with them, however, the CALL class provided them with a better grasp of the technology as well as yielding novel insights into how to deal with the NiceNet(<http://nicenet.org>), that is to say, as a courseware management application developed by NiceNet—a non-profit organization of Internet

professionals devoted to providing free services to the Internet as well as the education community. In accord with Michael, nineteen other students professed their admiration for the NiceNet and its helpfulness in handling Internet affairs (T6), as is the case with Michael and Eliza who were able to extend their opinions regarding the use of CALL in their level of learning and highlighted that:

Before the CALL class, we have just been using the laptops, tablets, smartphones, and desktop computers, but NiceNet, as a brand new application, in the CALL class has been a turning point in our education process by which it was easy for us to check the mails sent by our instructor and connect, chat, like, and share our academic opinions with other members of the group in the NiceNet website during the course of instruction, (translated by the researchers).

It is worthwhile mentioning that the qualitative analysis of the respondents' attitudes towards CALL unveiled further perspectives on the sensitivity of CALL in that it made them better writers. As a matter of fact, using CALL features in their daily affairs, the students claimed that the CALL class contributed them abundantly to better write their other course projects. Anita and Fatima argued on the importance of ameliorating their writing skill in the cyberspace context as they were emailing their instructor as well as their classmates regularly. Albeit the improvement of writing skill (T7), there was a mention of more pace of learning, especially writing while typing the words with the keyboard of the computer. Such was the case of Fatima who maintained:

Once typing with the keyboard of my laptop, I was able to easily look up the words into on-line dictionaries at the same time. This made me more proficient at having mastery over both typing the words and writing my English sentences. So, on the one hand, my knowledge of writing has improved, especially when I was using the digital version of Oxford Collocation Dictionary. And, on the other hand, my pace of English learning, especially once using appropriate collocated words in writing my emails, also increased drastically (translated by the researchers).

In summary, one can claim that in-depth analysis of the students' responses concerning their attitudes towards CALL gave rise to the emergence of the coding schemes and thematic categorizations illustrated in Table 2.



Table 2. Major Themes and Coding Schemes on Students' Attitudes towards CALL

CALL	Theme	Code
Importance of	Course usefulness	T1
	Students' enthusiasm for CALL	T2
	Communication via CALL	T3
	Chatting on-line	T4
	More self-confidence	T5
	Handling Internet affairs	T6
	Improvement of writing skill	T7

#### 4.2 CALL practice in EFL contexts from now on

It goes without saying that careful examination of the students' perceptions towards the CALL class paved the way for a critically considerable significance for CALL from a broad spectrum of dimensions. However, based upon the mentioned attitudes towards the CALL, short shrift was given to the critical features of CALL in terms of pedagogical facets. To put it bluntly, the stance of CALL was somehow deemed to be overlooked in the light of teaching which is considered as a noticeable issue of concern, nowadays.

By the same token, almost all the interviewees, especially the English institute teacher students, claimed that they more or less, albeit not constantly, applied technology in their teaching styles (T8); however, they decided to employ it further in their teaching styles as seriously as possible. When explicated meaningfully, the twelve English institute teacher students who have had enough experience in teaching from 1 to 3 years compromised that teaching English through technology plays a pivotal role in acknowledging its substantial criticality, especially when it comes to the CALL aspects while assessing their learners by dint of such elements. Many studies have emphasized the important role that language teachers' perceptions about CALL plays in the use and applicability of these technologies in language classes (Brandl, 2002; Bullock, 2004; Feng, 2013; Jung, 2005; Kern, 2006; Kessler & Plakans, 2008; Teo, 2008). This importance is so much that the Bullock (2004) calls teachers' perceptions as the main supportive or debilitating factor in the application of CALL in EFL/ESL classes. In this connection, Elisa, Hammond and Josef placed emphasis on their willingness in teaching CALL (T9) in order to exert a strong influence on their learners as the major grounds. For example, Josef stated that:

To tell you the truth, I have been teaching English in elementary, intermediate, upper-intermediate, and advanced levels for the past 3 years, but I did not take CALL as a serious element in my

way of teaching. This class proved that the students can get a good grasp of English as they are exposed to much more English on-line or digital softwares. From now on, I will assign a plethora of internet-based supplementary materials to my English learners to a great extent, (respondent's wording).

In addition, Felicity maintained that she strove to find a solution about the demanding task of correcting her students' errors on the paper, viz. the traditional form of pencil and paper strategy, whenever she wanted to give them some feedback in improving their writing skill. Suffice it to mention from her final words:

Edition and revision of my students' writing papers was a time-consuming task and I needed to quicken my pace in revising their writing papers; therefore, I made up my minds to tell them to type their writing in a Microsoft Word Document file and send it to my email address so that I could check their errors and send them back. This made them better writers by the use of technology and they were able to experience learning English in the new cyberspace. On the whole it made my teaching faster and faster and more efficient (respondent's wording).

On the other hand, when seen the extremely fruitful benefits of CALL, non-teacher students became enthusiastic about using technology, especially the CALL tenets further in their future teaching styles (T10) and decided to utilize it in their teaching methodology once they will have become English teachers one day. Such was the case of Harold who argued:

Being aware of the benefits of CALL in teaching methodology, I believe that CALL as a critical issue and a kind of neat and tidy instrument helps me to become a famous English teacher in future. Definitely this peps me and my students up (translated by the researchers).

To succinctly add, Sandra also adhered to the methodology of CALL and asserted that she intends to teach English through the CALL method. Sandra elaborately puts:

When I enrolled for the course unit, I thought that it is just a preliminary class in order to introduce us with some dimensions of the world of computer, internet, cyberspace, SPSS (Statistical Package for the Social Sciences) software and the like. However, as it turned out, it came to be applied as a new avenue of pedagogical issue. Besides I am doing my B.A. just for fun and

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totally hated teaching, but now I like to experience teaching at English institutes with the new method of CALL which, I am sure, spurs the learners into acquiring English as best and easily as possible (translated by the researchers).

As regards all views, Table 3 laconically illustrates the emerging themes behind the students' perceptions of the CALL class.

Table 3. Major Themes and Coding Schemes on Perceived Reasons for CALL Practice

CALL	Theme	Code
	Applying technology in teaching styles	T8
Significance of	Willingness in teaching CALL	T9
	CALL tenets further in future teaching styles	T10

To sum up, the current study aimed to qualitatively investigate what Iranian university English students perceive the CALL class before the course, during the course of instruction and after the end of the course, hereafter. With respect to the interviewees' insights into the CALL class, it was revealed that CALL as a new phenomenon was welcomed by the students and motivated them to practice it in their own teaching styles. When seen in this light, these findings become much more significant while they are suggestive of the other findings emerged by other researchers' results who laid emphasis on the use of computer in students' learning and classroom instruction and how they felt about it as a crucial issue of education (Collis & Sakamoto, 1996). Furthermore, results of the study are compatible with Lockard, Abrams, and Many (1997) while referring to the role of CALL as an inescapable component of changes in education in the United States, indeed through the world. To put it in details, close examination of the students' viewpoints was indicative of their positive perceptions towards high sensitivity and criticality of CALL where findings are in line with Min (1998) whose study results were suggestive of (a) attitudes towards learning the English language, (b) attitudes towards the use of computers in general, and (c) attitudes towards learning the English language with computers. The findings, all in all, provided data regarding Korean adult language learners' attitudes towards the use of computers in English-language learning.

Overall, these studies along with the results of the present study suggest that attitudes seem to be essential factors in a positive learning environment. The learners' perceptions of learning are indeed a primary factor in their learning environment, especially once towards CALL. Other studies in line with students' insights into the use of CALL in the context of

classroom needs the importance of conducting further studies in this educational area.

## 5 Conclusions

This paper has qualitatively investigated how CALL (Computer-assisted Language Learning) is viewed and perceived by the Iranian university English students before, during, instruction, and after finishing a related CALL course. The emerging findings achieved from the in-depth analysis of the participants' responses to the interview questions suggested that almost all the students highly commended the usage of the course in their educational and daily affairs and they were vehemently heartened to practice it in their teaching and learning of English. They were capable of communicating with each other through the cyberspace at any time and any place, as they were to some extent familiar with it. Furthermore, they held positive perceptions of the course and maintained that it provided them with a plethora of supplementary materials for the betterment of their writing skill with more pace of learning. They became also able to extend their academic and non-academic opinions of how they can improve their English through the use of NiceNet application as pertinent to the CALL. Positively speaking, for the purpose of this study, the students were divided into two groups of teachers and non-teachers. The teacher student group, who had enough experience teaching at different institutes of Yasouj city, was inclined to employ the CALL tenets further in their teaching methodology as well as their learning. On the other side, the latter group who failed to have enough experience at teaching English, became enthusiastic about the CALL features and decided to put them into practice one day once in their teaching methodology.

Clearly, the key findings show that there is reason to believe that CALL environments provide new and exciting learning opportunities for students. Our results suggest that educators should take the features of various learning spaces into account when they plan student learning and establish teaching practices. In order to realize the valuable affordances provided by CALL environments educators, as they have always done, will have to undertake complex pedagogical reasoning in their planning and teaching.

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An investigation into Iranian undergraduate English students' perceptions  
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